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Gfeller et al.

(54) HYBRID INTERVERTEBRAL DISC SPACER DEVICE AND METHOD OF MANUFACTURING THE SAME

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(57) ABSTRACT

A hybrid spinal implant device, and method of making the same are disclosed. The spinal implant device comprises two facing endplates, each having at least one anchoring wall or pin element, and a plastic spacer anchored to and located between the two endplates. The endplates may be manufactured from titanium. The plastic spacer may be manufactured from a radiolucent, and bio-compatible polymer-based including polyetheretherketone polyetherketone, polyetherketoneketone, and/or fiber reinforced plastic. The endplates made of titanium allow for enhanced bone growth, while the plastic/PEEK spacer element allows for improved load absorption and distribution. The spinal implant device, using titanium endplates and a PEEK spacer, provides excellent radiolucency thereby eliminating the need for X-ray markers either intra- or post-operation. The manufacturing method for the hybrid spinal implant device uses injection molding to insert or back injection mold the spacer between the two endplates.

17 Claims, 7 Drawing Sheets

